Innovation for Our Energy Future



Join us for a "bonus" seminar in our series of "brown bag" seminars, sponsored by the **National Renewable Energy Laboratory and** the U.S. Department of **Energy. Each seminar** is held at NREL's **Washington office with** a videoconference link to Golden, Colorado. Topics focus on new and innovative renewable energy and energy analysis strategies, models, and technologies.



Energy Analysis Seminar Series

A "brown bag" analytical seminar series

An Introduction to the U.S. Life-Cycle Inventory (LCI) Database

Michael Deru, Senior Engineer

National Renewable Energy Laboratory (NREL)

Thursday, March 24, 2005

Noon – 1 p.m. (in Washington, D.C.) 10 – 11 a.m. (videoconference in Golden, Colo.)

There is growing public concern about how our activities affect the quality of our air, water, and land—and what impact we have on resource availability and the global environment. Life-cycle analysis (LCA) is a holistic approach used to assess the environmental impact of products and processes. The starting point of an LCA is a life-cycle inventory (LCI), which looks at the energy and material that flows into and out of an environment as it produces something. During this seminar, Michael Deru will discuss the U.S. LCI database project,



Michael Deru

which is managed by NREL's Center for Buildings and Thermal Systems. The primary objective of this project, initiated in 2001, is to create and maintain a publicly available LCI database for commonly used materials, products, and processes. Deru will discuss the attributes of this public database, the transparency of its data collection and analysis, and its compatibility with international standards and practices.

Michael Deru has been working with the National Renewable Energy Laboratory (NREL) in Golden, Colorado, since 1994 and is currently a senior engineer with the Center for Buildings and Thermal Systems. He has completed extensive research on building thermodynamics including heat and moisture transfer in the ground. His current work includes design, analysis, and monitoring of integrated energy-efficient measures in commercial buildings. He is currently the project leader for DOE's Performance Metrics Project and project leader for the development of the U.S. LCI Database. Deru received his master's and Ph.D. in mechanical engineering from Colorado State University; and his bachelor's in mechanical engineering from the University of Wyoming.

Golden, Colo., information

1617 Cole Blvd., Golden, Colorado Building 15, Conference Room 375

Please contact Lynne Fenn at lynne_fenn@nrel.gov or 303-384-7439

Washington, D.C., information

901 D Street SW (also the Aerospace Building, 370 L'Enfant Promenade), adjacent to the Forrestal Building

Please contact Wanda Addison at wanda_addison@nrel.gov or 202-646-5278

If you are interested in participating in the seminar via conference call, please contact Wanda Addison at wanda_addison@nrel.gov or 202-646-5278 for instructions.

